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RO-PRO desalination: An integrated low-energy approach to seawater desalination

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#	Paper	IF	Citations
157	Dual stage PRO process for power generation from different feed resources. <i>Desalination</i> , 2014 , 352, 118-127	10.3	18
156	Experimental results from RO-PRO: a next generation system for low-energy desalination. 2014 , 48, 6437-43		115
155	Forward osmosis niches in seawater desalination and wastewater reuse. <i>Water Research</i> , 2014 , 66, 122-139	10.5	259
154	Recent Advances in Osmotic Energy Generation via Pressure-Retarded Osmosis (PRO): A Review. <i>Energies</i> , 2015 , 8, 11821-11845	3.1	54
153	An Optimization-Simulation Approach for Groundwater Abstraction under Recharge Uncertainty. 2015 , 29, 3681-3695		37
152	Stand-alone seawater RO (reverse osmosis) desalination powered by PV (photovoltaic) and PRO (pressure retarded osmosis). <i>Energy</i> , 2015 , 86, 423-435	7.9	41
151	Effect of the feed and draw solution temperatures on PRO performance: Theoretical and experimental study. <i>Desalination</i> , 2015 , 365, 182-195	10.3	30
150	Reducing the specific energy consumption of 1st-pass SWRO by application of high-flux membranes fed with high-pH, decarbonated seawater. <i>Water Research</i> , 2015 , 85, 185-92	12.5	12
149	Osmotic power generation by pressure retarded osmosis using seawater brine as the draw solution and wastewater retentate as the feed. <i>Journal of Membrane Science</i> , 2015 , 479, 148-158	9.6	133
148	Design optimization of high performance dual stage pressure retarded osmosis. <i>Desalination</i> , 2015 , 355, 217-224	10.3	14
147	Pressure retarded osmosis (PRO) for integrating seawater desalination and wastewater reclamation: Energy consumption and fouling. <i>Journal of Membrane Science</i> , 2015 , 483, 34-41	9.6	116
146	Sandwich-structured hollow fiber membranes for osmotic power generation. <i>Desalination</i> , 2015 , 376, 73-81	10.3	15
145	Maximum power point tracking (MPPT) of a scale-up pressure retarded osmosis (PRO) osmotic power plant. <i>Applied Energy</i> , 2015 , 158, 584-596	10.7	24
144	Impaired Performance of Pressure-Retarded Osmosis due to Irreversible Biofouling. 2015 , 49, 13050-8		64
143	Bioelectrochemical production of hydrogen in an innovative pressure-retarded osmosis/microbial electrolysis cell system: experiments and modeling. 2015 , 8, 116		15
142	Membrane Distillation and Reverse Electrodialysis for Near-Zero Liquid Discharge and low energy seawater desalination. <i>Journal of Membrane Science</i> , 2015 , 496, 325-333	9.6	132
141	What is next for forward osmosis (FO) and pressure retarded osmosis (PRO). 2015 , 156, 856-860		115

140	Evaluation of FO-RO and PRO-RO designs for power generation and seawater desalination using impaired water feeds. <i>Desalination</i> , 2015 , 368, 27-35	10.3	39
139	Pressure retarded osmosis: advancement in the process applications for power generation and desalination. <i>Desalination</i> , 2015 , 356, 31-46	10.3	84
138	Preliminary experimental analysis of a small-scale prototype SWRO desalination plant, designed for continuous adjustment of its energy consumption to the widely varying power generated by a stand-alone wind turbine. <i>Applied Energy</i> , 2015 , 137, 222-239	10.7	47
137	Salinity gradient energy. 2016 , 1-17		6
136	Pressure retarded osmosis. 2016 , 55-75		3
135	Pilot-Scale Investigation of Forward/Reverse Osmosis Hybrid System for Seawater Desalination Using Impaired Water from Steel Industry. 2016 , 2016, 1-9		13
134	Real-time emulation of a pressure retarded osmosis power generation system. 2016 ,		2
133	Evaluation of the detrimental effects in osmotic power assisted reverse osmosis (RO) desalination. <i>Renewable Energy</i> , 2016 , 93, 608-619	8.1	4
132	Maximize the operating profit of a SWRO-PRO integrated process for optimal water production and energy recovery. <i>Renewable Energy</i> , 2016 , 94, 304-313	8.1	11
131	Organic fouling and osmotic backwashing in PRO. 2016 , 57, 10086-10092		3
130	Optimization of Osmotic Desalination Plants for Water Supply Networks. 2016 , 30, 3965-3978		14
129	Analog electric circuit representation of energy conversion by pressure retarded osmosis. 2016 ,		
128	ENERGY CONVERSION FROM SALINITY GRADIENT USING MICROCHIP WITH NAFION MEMBRANE. 2016 , 42, 1660183		2
127	Efficient thermal desalination technologies with renewable energy systems: A state-of-the-art review. 2016 , 33, 351-387		39
126	Changing membrane orientation in pressure retarded osmosis for sustainable power generation with low fouling. <i>Desalination</i> , 2016 , 389, 197-206	10.3	41
125	River-to-sea pressure retarded osmosis: Resource utilization in a full-scale facility. <i>Desalination</i> , 2016 , 389, 39-51	10.3	52
124	Reverse Osmosis Pressure Retarded Osmosis hybrid system: Modelling, simulation and optimization. <i>Desalination</i> , 2016 , 389, 78-97	10.3	37
123	Reverse osmosis applications: Prospect and challenges. <i>Desalination</i> , 2016 , 391, 112-125	10.3	165

122	Integration and optimization of pressure retarded osmosis with reverse osmosis for power generation and high efficiency desalination. <i>Energy</i> , 2016 , 103, 110-118	7.9	37
121	Computational fluid dynamics (CFD) based modelling of osmotic energy generation using pressure retarded osmosis (PRO). <i>Desalination</i> , 2016 , 389, 98-107	10.3	8
120	Maximum power point tracking (MPPT) control of pressure retarded osmosis (PRO) salinity power plant: Development and comparison of different techniques. <i>Desalination</i> , 2016 , 389, 187-196	10.3	6
119	Recent trends in membranes and membrane processes for desalination. <i>Desalination</i> , 2016 , 391, 43-60	10.3	180
118	Experimental investigation of pressure retarded osmosis for renewable energy conversion: Towards increased net power. <i>Applied Energy</i> , 2016 , 164, 425-435	10.7	34
117	Energy recovery by pressure retarded osmosis (PRO) in SWRO/PRO integrated processes. <i>Applied Energy</i> , 2016 , 162, 687-698	10.7	87
116	Assessing the current state of commercially available membranes and spacers for energy production with pressure retarded osmosis. <i>Desalination</i> , 2016 , 389, 108-118	10.3	56
115	Pressure-retarded osmosis for power generation from salinity gradients: is it viable?. 2016 , 9, 31-48		240
114	Development of thin-film composite PRO membranes with high power density. 2016 , 57, 10093-10100		6
113	An evaluation of membrane properties and process characteristics of a scaled-up pressure retarded osmosis (PRO) process. <i>Desalination</i> , 2016 , 378, 1-13	10.3	17
112	Urban Energy Hubs and Microgrids: Smart Energy Planning for Cities. 2017 , 129-175		0
111	Conceptual designs of integrated process for simultaneous production of potable water, electricity, and salt. <i>Desalination</i> , 2017 , 409, 96-107	10.3	4
110	System scaling approach and thermoeconomic analysis of a pressure retarded osmosis system for power production with hypersaline draw solution: A Great Salt Lake case study. <i>Energy</i> , 2017 , 126, 97-111	7.9	15
109	Capillary-driven low grade heat desalination. <i>Desalination</i> , 2017 , 410, 10-18	10.3	12
108	Single and dual stage closed-loop pressure retarded osmosis for power generation: Feasibility and performance. <i>Applied Energy</i> , 2017 , 191, 328-345	10.7	31
107	On the present and future economic viability of stand-alone pressure-retarded osmosis. <i>Desalination</i> , 2017 , 408, 133-144	10.3	27
106	Techno-economic assessment of a closed-loop osmotic heat engine. <i>Journal of Membrane Science</i> , 2017 , 535, 178-187	9.6	27
105	Evaluation the potential and energy efficiency of dual stage pressure retarded osmosis process. <i>Applied Energy</i> , 2017 , 199, 359-369	10.7	22

104	Osmotic energy recovery from Reverse Osmosis using two-stage Pressure Retarded Osmosis. <i>Energy</i> , 2017 , 132, 213-224	7.9	17
103	Advanced charged porous membranes with ultrahigh selectivity and permeability for acid recovery. <i>Journal of Membrane Science</i> , 2017 , 536, 11-18	9.6	27
102	Recent Developments in Forward Osmosis Processes. 2017 , 16, 9781780408125		7
101	fEvaluation of renewable energy technologies and their potential for technical integration and cost-effective use within the U.S. energy sector. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 80, 1372-1388	16.2	47
100	Energy-efficient seawater desalination and wastewater treatment using osmotically driven membrane processes. <i>Desalination</i> , 2017 , 413, 86-100	10.3	34
99	Energy recovery from two-stage SWRO plant using PRO without external freshwater feed stream: Theoretical analysis. <i>Renewable Energy</i> , 2017 , 105, 84-95	8.1	17
98	The WaterEnergy Nexus: Solutions towards Energy-Efficient Desalination. 2017 , 5, 1136-1155		23
97	Pressure-retarded osmosis with wastewater concentrate feed: Fouling process considerations. <i>Journal of Membrane Science</i> , 2017 , 542, 233-244	9.6	26
96	Reducing specific energy consumption of seawater desalination: Staged RO or RO-PRO?. <i>Desalination</i> , 2017 , 422, 124-133	10.3	19
95	Real-Time Emulation of a Pressure-Retarded Osmotic Power Generation System. 2017 , 53, 5768-5776		8
94	Zero thermal input membrane distillation, a zero-waste and sustainable solution for freshwater shortage. <i>Applied Energy</i> , 2017 , 187, 910-928	10.7	27
93	Green energy generation by pressure retarded osmosis: State of the art and technical advancement review. 2017 , 14, 337-360		32
92	Design and fabrication of inner-selective thin-film composite (TFC) hollow fiber modules for pressure retarded osmosis (PRO). 2017 , 172, 32-42		39
91	Introduction to PRO for energy conversion applications including an electric equivalent circuit. 2017 , 11, 115-122		2
90	Reverse electrodialysis powered greenhouse concept for water- and energy-self-sufficient agriculture. <i>Applied Energy</i> , 2017 , 187, 390-409	10.7	46
89	Thermodynamic analysis of brine management methods: Zero-discharge desalination and salinity-gradient power production. <i>Desalination</i> , 2017 , 404, 291-303	10.3	48
88	Operation and control of pressure retarded osmosis for maximum power. 2017 ,		
87	Theoretical Analysis of Pressure Retarded Membrane Distillation (PRMD) Process for Simultaneous Production of Water and Electricity. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 14888-14901	10.7	21

86	Pressure Retarded Osmosis as Renewable Energy Source. 2017 , 1-54		1
85	Water and Salt Fluxes in Pressure Retarded Osmosis. 2017 , 55-95		2
84	Integration of PRO into Desalination Processes. 2017 , 129-151		3
83	3.8 Membrane-Based Processes for Sustainable Power Generation Using Water: Pressure-Retarded Osmosis (PRO), Reverse Electrodialysis (RED), and Capacitive Mixing (CAPMIX). 2017 , 206-248		14
82	Cooling water use in thermoelectric power generation and its associated challenges for addressing water-energy nexus. 2018 , 1, 26-41		74
81	Novel thin film composite hollow fiber membranes incorporated with carbon quantum dots for osmotic power generation. <i>Journal of Membrane Science</i> , 2018 , 551, 94-102	9.6	40
80	Techno-economic evaluation of various RO+PRO and RO+FO integrated processes. <i>Applied Energy</i> , 2018 , 212, 1038-1050	10.7	61
79	The forward osmosis-pressure retarded osmosis (FO-PRO) hybrid system: A new process to mitigate membrane fouling for sustainable osmotic power generation. <i>Journal of Membrane Science</i> , 2018 , 559, 63-74	9.6	42
78	Challenges and opportunities at the nexus of energy, water, and food: A perspective from the southwest United States. 2018 , 5, 1		7
77	Thin-film composite hollow fiber membrane with inorganic salt additives for high mechanical strength and high power density for pressure-retarded osmosis. <i>Journal of Membrane Science</i> , 2018 , 555, 388-397	9.6	45
76	Development of a SWRO-PRO hybrid desalination system: pilot plant investigations. 2018 , 18, 473-481		6
75	Recent progress in the use of renewable energy sources to power water desalination plants. <i>Desalination</i> , 2018 , 435, 97-113	10.3	274
74	Towards sustainability in water-energy nexus: Ocean energy for seawater desalination. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 82, 3833-3847	16.2	74
73	Model-based optimization and comparative analysis of open-loop and closed-loop RO-PRO desalination systems. <i>Desalination</i> , 2018 , 446, 83-93	10.3	6
72	Progress and prospects in reverse electrodialysis for salinity gradient energy conversion and storage. <i>Applied Energy</i> , 2018 , 225, 290-331	10.7	150
71	Draw Solute Selection. 2018 , 87-122		2
70	Recent Issues Relative to a Low Salinity Pressure-Retarded Osmosis Process and Suggested Technical Solutions. 2018 , 273-295		
69	High-Salinity Pressure Retarded Osmosis Using Seawater Reverse Osmosis Brine. 2018 , 297-316		2

68	A simulation study with a new performance index for pressure-retarded osmosis processes hybridized with seawater reverse osmosis and membrane distillation. <i>Desalination</i> , 2018 , 444, 118-128	10.3	15
67	Intensification and energy minimization of seawater reverse osmosis desalination through high-pH operation: Temperature dependency and second pass implications. 2018 , 131, 84-91		5
66	A comprehensive review of energy consumption of seawater reverse osmosis desalination plants. <i>Applied Energy</i> , 2019 , 254, 113652	10.7	140
65	Integrated membrane distillation-reverse electro dialysis system for energy-efficient seawater desalination. <i>Applied Energy</i> , 2019 , 253, 113551	10.7	45
64	Cost-oriented optimization of osmotic dilution based on concentration-dependent hydraulic pressure. <i>Desalination</i> , 2019 , 467, 113-124	10.3	7
63	Optimization of module pressure retarded osmosis membrane for maximum energy extraction. <i>Journal of Water Process Engineering</i> , 2019 , 32, 100935	6.7	15
62	Modeling and Simulation Studies Analyzing the Pressure-Retarded Osmosis (PRO) and PRO-Hybridized Processes. <i>Energies</i> , 2019 , 12, 243	3.1	14
61	Pre-treatment of wastewater retentate to mitigate fouling on the pressure retarded osmosis (PRO) process. 2019 , 215, 390-397		26
60	Increasing osmotic power and energy with maximum power point tracking. <i>Applied Energy</i> , 2019 , 238, 683-695	10.7	6
59	Rapid and selective lithium recovery from desalination brine using an electrochemical system. 2019 , 21, 667-676		27
58	Limiting power density in pressure-retarded osmosis: Observation and implications. <i>Desalination</i> , 2019 , 467, 51-56	10.3	24
57	Clean and stable utilization of solar energy by integrating dish solar Stirling engine and salinity gradient technology. <i>Energy</i> , 2019 , 182, 802-813	7.9	9
56	Potential and analysis of an osmotic power plant in the Magdalena River using experimental field-data. <i>Energy</i> , 2019 , 180, 548-555	7.9	14
55	Integrated and hybrid process technology. 2019 , 279-328		5
54	Investigation of the reduced specific energy consumption of the RO-PRO hybrid system based on temperature-enhanced pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2019 , 581, 439-452	9.6	28
53	Pressure retarded osmosis: Operating in a compromise between power density and energy efficiency. <i>Energy</i> , 2019 , 172, 592-598	7.9	16
52	Pressure-Retarded Osmosis. 2019 , 339-359		1
51	Insight into emerging applications of forward osmosis systems. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 72, 1-17	6.3	25

50	Hybrid System. 2019 , 143-162		1
49	Towards a low-energy seawater reverse osmosis desalination plant: A review and theoretical analysis for future directions. <i>Journal of Membrane Science</i> , 2020 , 595, 117607	9.6	80
48	A tool for assessing the scalability of pressure-retarded osmosis (PRO) membranes. <i>Renewable Energy</i> , 2020 , 149, 987-999	8.1	12
47	A modeling framework to evaluate blending of seawater and treated wastewater streams for synergistic desalination and potable reuse. <i>Water Research</i> , 2020 , 170, 115282	12.5	12
46	Hybrid technologies: The future of energy efficient desalination A review. <i>Desalination</i> , 2020 , 495, 114659	10.3	60
45	Use of Pressure-Retarded-Osmosis to reduce Reverse Osmosis energy consumption by exploiting hypersaline flows. <i>Energy</i> , 2020 , 211, 118969	7.9	6
44	Management of concentrate and waste streams for membrane-based algal separation in water treatment: A review. <i>Water Research</i> , 2020 , 183, 115969	12.5	9
43	FO-RO for mining wastewater treatment. 2020 , 325-336		2
42	Pressure-retarded osmosis for enhanced oil recovery. <i>Desalination</i> , 2020 , 491, 114568	10.3	7
41	Forward osmosis and pressure retarded osmosis process modeling for integration with seawater reverse osmosis desalination. <i>Desalination</i> , 2020 , 491, 114583	10.3	17
40	Energy for desalination: A state-of-the-art review. <i>Desalination</i> , 2020 , 491, 114569	10.3	113
39	A comprehensive review of the feasibility of pressure retarded osmosis: Recent technological advances and industrial efforts towards commercialization. <i>Desalination</i> , 2020 , 491, 114501	10.3	22
38	Nanoclays-Incorporated Thin-Film Nanocomposite Membranes for Reverse Osmosis Desalination. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1902108	4.6	23
37	Thermodynamic analysis of a solar thermal facilitated membrane seawater desalination process. <i>Journal of Cleaner Production</i> , 2020 , 256, 120398	10.3	12
36	Optimization of two-stage seawater reverse osmosis membrane processes with practical design aspects for improving energy efficiency. <i>Journal of Membrane Science</i> , 2020 , 601, 117889	9.6	12
35	A review of emerging trends in membrane science and technology for sustainable water treatment. <i>Journal of Cleaner Production</i> , 2020 , 266, 121867	10.3	80
34	Energy Recovery in SWRO Desalination: Current Status and New Possibilities. <i>Frontiers in Sustainable Cities</i> , 2020 , 2,	2.2	11
33	Energetic and economic feasibility of a combined membrane-based process for sustainable water and energy systems. <i>Applied Energy</i> , 2020 , 264, 114699	10.7	13

32	Sustainable membrane technology for resource recovery from wastewater: Forward osmosis and pressure retarded osmosis. <i>Journal of Water Process Engineering</i> , 2021 , 39, 101758	6.7	12
31	Process improvement of sea water reverse osmosis (SWRO) and subsequent decarbonization. <i>Desalination</i> , 2021 , 499, 114791	10.3	9
30	Salinity gradient energy generation by pressure retarded osmosis: A review. <i>Desalination</i> , 2021 , 500, 114841	10.3	21
29	Sustainable Design and Model-Based Optimization of Hybrid ROBRO Desalination Process. 2021 , 43-68		
28	Recent developments in pressure retarded osmosis for desalination and power generation. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 138, 110492	16.2	23
27	Membrane Synthesis for Commercially Viable Osmotic Power Generation by Pressure Retarded Osmosis (PRO). 2021 , 547-557		
26	The applications of integrated osmosis processes for desalination and wastewater treatment. 2021 , 313-332		
25	Does Pressure-Retarded Osmosis Help Reverse Osmosis in Desalination?. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 4366-4374	3.9	1
24	Pressure retarded osmosis: Advancement, challenges and potential. <i>Journal of Water Process Engineering</i> , 2021 , 40, 101950	6.7	7
23	Evidence of solution-diffusion-with-defects in an engineering-scale pressure retarded osmosis system. <i>Journal of Membrane Science</i> , 2021 , 625, 119135	9.6	2
22	Temperature-enhanced pressure retarded osmosis powered by solar energy: Experimental validation, economic consideration, and potential implication. <i>Chemical Engineering Research and Design</i> , 2021 , 170, 380-388	5.5	2
21	Conceptual Design of a Sustainable Hybrid Desalination Process Using Liquefied Natural Gas Cold Energy. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	2
20	Comprehensive review of osmotic dilution/concentration using FO membranes for practical applications. <i>Desalination</i> , 2021 , 515, 115190	10.3	4
19	Optimizing experimental parameters in sequential CO2 mineralization using seawater desalination brine. <i>Desalination</i> , 2021 , 519, 115309	10.3	0
18	On the importance of selectivity and support layer compaction in pressure retarded osmosis. <i>Desalination</i> , 2021 , 498, 114804	10.3	4
17	Temperature effects on salinity gradient energy harvesting and utilized membrane properties □ Experimental and numerical investigation. <i>Sustainable Energy Technologies and Assessments</i> , 2021 , 48, 101666	4.7	0
16	Effect of Hydraulic Pressure on Organic Fouling in Pressure Retarded Osmosis (PRO) Process. <i>Journal of the Korean Society of Water and Wastewater</i> , 2015 , 29, 133-138	0.2	1
15	The effect of backing layer for pro membranes and modules. <i>Journal of the Korean Society of Water and Wastewater</i> , 2016 , 30, 553-559	0.2	1

14	Modern Use of Water Produced by Purification of Municipal Wastewater: A Case Study. <i>Energies</i> , 2021 , 14, 7610	3.1	1
13	Membrane-based indirect power generation technologies for harvesting salinity gradient energy - A review. <i>Desalination</i> , 2022 , 525, 115485	10.3	1
12	Electrocoagulation pretreatment of pulp and paper wastewater for low pressure reverse osmosis membrane fouling control.. <i>Environmental Science and Pollution Research</i> , 2022 , 1	5.1	
11	Membranes for blue energy conversion by pressure-retarded osmosis (PRO). 2022 , 17-90		
10	Desalination Process Design Assisted by Osmotic Power for High Water Recovery and Low Energy Consumption. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	1
9	Closed-loop pressure retarded osmosis draw solutions and their regeneration processes: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 159, 112191	16.2	0
8	Evaluation of the Specific Energy Consumption of Sea Water Reverse Osmosis Integrated with Membrane Distillation and Pressure-Retarded Osmosis Processes with Theoretical Models.. <i>Membranes</i> , 2022 , 12,	3.8	0
7	Novel data-driven energy management of a hybrid photovoltaic-reverse osmosis desalination system using deep reinforcement learning. <i>Applied Energy</i> , 2022 , 317, 119184	10.7	1
6	The Global Carbon Footprint and How New Carbon Mineralization Technologies Can Be Used to Reduce CO2 Emissions. <i>ChemEngineering</i> , 2022 , 6, 44	2.6	1
5	A stepwise approach to predict the performance of forward osmosis operation: Effect of temperature and flow direction. <i>Desalination</i> , 2022 , 538, 115889	10.3	0
4	Batch reverse osmosis (BRO)-adsorption desalination (AD) hybrid system for multipurpose desalination and minimal liquid discharge. <i>Desalination</i> , 2022 , 539, 115945	10.3	1
3	Evaluation of low energy consumption control for seawater desalination on Penghu Island. 0958305X2211276		0
2	Opportunities of Reducing the Energy Consumption of Seawater Reverse Osmosis Desalination by Exploiting Salinity Gradients. 2022 , 12, 1045		0
1	Membrane-based water and wastewater treatment technologies: Issues, current trends, challenges, and role in achieving sustainable development goals, and circular economy. 2023 , 137993		0